

**BIDENS MELCHERTII (ASTERACEAE), A NEW SPECIES  
FROM JALISCO, MEXICO**

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**ABSTRACT**

A new species, *Bidens melchertii* **sp. nov.**, is described from the state of Jalisco, Mexico. It is closely related to the square-stemmed, white-rayed, perennial, *B. pringlei*, but is readily distinguished from the latter by characters of the achene.

**KEY WORDS:** *Bidens*, Asteraceae, Mexico, Jalisco.

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Preparation of a taxonomic treatment of the genus *Bidens* for Mexico by Prof. Thomas Melchert of the University of Iowa has necessitated description of the following novelty:

***Bidens melchertii* B. L. Turner, sp. nov.** Fig. 1.

Similis *Bidens pringlei* S. Wats. sed acheniis sine pappis (non biaristatis) et brevioribus, corporibus tetragonis et non recurvatis.

Erect rhizomatous herbs to 80 cm high. Stems suffruticose, leafy throughout, the lower portions multinerved, the upper essentially square in cross section, glabrous or nearly so. Leaves deeply (1)-2 pinnatisect, 4.0-7.5 cm long; petioles 1-2 cm long; ultimate divisions linear to lance-linear, 0.5-2.0 mm wide, their apices somewhat pungent. Heads showy, 2-3 cm across the expanded rays. Ray florets 8; ligules creamy white, 6-12 mm long, ca. 5 mm wide. Disk florets numerous, yellow. Outer phyllaries ca 10, linear with sharply acute apices, recurving with age. Inner phyllaries yellow-margined. Receptacular bracts linear-lanceolate, their apices extending beyond the



Fig. 1. *Bidens melchertii*, holotype (TEX).

disk florets. Achenes epappose, black, glabrous, ca. as long as the chaff, linear, tetragonal in cross section, the outer series notably incurved and somewhat obcompressed, 3.7-6.0 mm long (the very outermost nearly linear-clavate, the innermost nearly straight, to 8.5 mm long).

TYPE: **MEXICO. JALISCO:** Mpio. De Talpa, "Km. 15 Camino El Tuito a Mina de Zimapan," pine forests, 1650 m, 14 Oct 1989, *Carlos Diaz Luna & Jose A. Lomali S. 20968* (HOLOTYPE: TEX; ISOTYPE: MEXU).

ADDITIONAL SPECIMEN EXAMINED: **MEXICO. JALISCO:** Mpio. De Talpa, Cerros de Las Minas de Oro, pine-oak forests, 2080 m, 30 Oct 1971, *R. Gonzales T. 562* (MICH).

*Bidens talpana* superficially resembles *B. pringlei*, both being square-stemmed perennials with deeply pinnatisect leaves having nearly filiform ultimate segments, and possessing showy white-rayed heads. Their achenes, however, are quite distinct, those of *B. pringlei* having flatter, long-attenuate achenes with slightly recurved biaristate apices (vs. pappus absent). *Bidens talpana* also resembles *B. mollifolia* Sherff, the two taxa having short, clavate to linear-clavate achenes.

The species is named for my sixth academic son, Thomas Melchert, currently Prof. Emer. at the Univ. of Iowa, Ames, and longtime scholar of the genera *Bidens*, *Cosmos*, and *Thelesperma*. He called this novelty to my attention in his submitted manuscript for the upcoming treatment of *Bidens* for Mexico (cf. Turner, Comps of Mexico, Vol. 1. Eupatorieae. *Phytologia* Memoirs 11. 1997). Without his knowledge, I proudly provided the eponym concerned.

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